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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,598	08/09/2001	Thomas D. Miller	020554-001010US	8191

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OKAMOTO & BENEDICTO, LLP  
P.O. BOX 641330  
SAN JOSE, CA 95164

EXAMINER
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NANO, SARGON N

ART UNIT	PAPER NUMBER
2157	7

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/927,598

**Applicant(s)**

MILLER ET AL.

**Examiner**

Sargon N Nano

**Art Unit**

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 24 is/are rejected.
- 7) ☒ Claim(s) 6 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2 Aug 04</u> . | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. This action is responsive to application filed on August 9, 2001. Claims 1 – 24 are pending examination.

#### *Claim Objection*

2. *Claims 6 and 18 are objected to because of the following informalities:*

*Claim state " 3 – 30 " Appropriate correction is advised.*

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,4,6,13, 16,18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "as close as possible" in claims 1 and 13 is a relative term which renders the claim indefinite. The term "as close as possible" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The term "somewhat faster" in claims 4, 6, 16 and 18 is a relative term which renders the claim indefinite. The term "as close as possible" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and

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one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 –8, 10-13–20, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy U.S. Patent No 6,697,341 in view of Markowitz et al. U.S. Patent No 6,651,103 (referred to hereafter as Markowitz).

As to claim 1 and 12 Roy teaches a communications system and a method for transporting video data from a centralized location to an end user, the system comprising:

a network that transmits video data to a system at a local center located as close as possible to the end user (see col. 2, line 29 – 45 and fig.1, Roy discloses a communication system which includes multiple devices in communication with each other);

a system at a local center capable of receiving video data from a centralized location a customer premises device capable of receiving the video data from the video cache; and a stream manager that controls a video stream from a centralized location to

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a local center ( see col. 2 lines 66 – col.3 line 4, Roy discloses the transmission of video data).

a stream manager that controls a video stream from centralized location to a local center (see col. 2 lines 46 – 64 , Roy discloses the multimedia bridge that controls the transmission of data between user devices).

Roy does not explicitly teach the limitation “ video cache” at a local center. However Markowitz teaches a method of downloading media data across a network where the media data is processed by a cache (see col. 6 lines 40-46) . It would have been obvious for one of the ordinary skill in the art at the time of the invention would include cache in the invention because doing so would allow faster retrieval of information and therefore optimizing the display time of the media.

As to claim 2 and 14 Roy teaches the system and a method wherein the network comprises any one or a combination of multiple packet based networks, wherein the network carries video data and control communications between the stream manager and the video cache (see col.3, lines 32 – 37 Roy discloses the communication between the network and a multimedia bridge which controls the setting of data between the source device and the destination device).

As to claim 3 and 15 Roy teaches the system and method wherein the network comprises any packet based network, wherein the network carries video data, the system further comprising communication links, wherein the communication links carry control communications between the stream manager and the video cache (see col.3,

lines 14 – 20, Roy discloses the communication signals between devices over communication links).

As to claim 4 and 16 Roy teaches the system and method wherein the video cache at the local center is capable of receiving video data from the centralized location at a transmission speed somewhat faster than the speed at which the end user is capable of viewing the material (see col. 4 lines 26 – 33, Roy discloses the desired performance parameters and the communication desired criteria).

As to claim 6 and 18 Roy teaches the system and method wherein the video cache based at the customer premises is capable both of receiving video data from the video cache at the local center at a speed somewhat faster than the end user is capable of viewing the material and is capable of delaying the viewing of the video content for 3-30 seconds to allow for a buffer to be created (see col.4 line 64 – col5 line 20, Roy discloses the transmission of video data based on the abilities of user devices and the allowed delay of video signals.

As to claim 8 and 20 Roy teaches the system and method wherein the video data may be previously stored , live or a combination of previously stored and live ( see col.4 lines 48 – 50 , Roy discloses the confirmation of multimedia conference which is stored live).

As to claim 10 and 22 Roy teaches the system and method wherein the stream manager is further capable of prioritizing the transmission of the various streams based on a combination of the following:

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the type of video data ( see col.4 lines 28 – 34 , and col. 7 lines 48 54, Dunlap discloses the data is video, audio and live) ;

the amount of video data remaining in the caches which require refreshing;

the speed at which the end user is viewing the video; and

the necessity to retransmit data due to corruption of video data and lost data packets (see col. 14 lines 14-26).

As to claim 11 and 23 Roy teaches the system and method wherein the stream manager is further capable of determining the volume of video data being transmitted over the network and distributing the total volume of video data over multiple networks, including transmission over the public Internet (see col. 8 lines 25 – 38, Roy discloses the volume of the video signal being sent).

As to claim 12 and 24 Roy teaches the system and method wherein the stream manager is further capable determining the instantaneous amount of bandwidth required to transmit the video information to each end user and staggering the transmission of high bandwidth instants with lower bandwidth instants in other video data streams to produce a smoother, aggregated stream (see col.6, line 37 – 55, Roy discloses the bandwidth required for different video formats).

As to claims 5, 7, 17 and 19 Roy teaches a communications system and a method for transporting video data from a centralized location to an end user, the system comprising:

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a network that transmits video data to a video cache at a local center located as close as possible to the end user ;

a video cache at a local center capable of receiving video data from a centralized location;

a customer premises device capable of receiving the video data from the video cache; and a stream manager that controls a video stream from a centralized location to a local center;

a stream manager that controls a video stream from centralized location to a local center .

Roy does not explicitly teach the limitation "retransmitting the necessary data"

However Markowitz teaches a method of retransmitting lost data to a client.

retransmitting of lost data ( see col. 2 line 3 – 12 Markowitz discloses the lost data that needs to be retransmitted) .

It would have been obvious for one ordinary skill in the art to include the step of retransmitting of the lost data because by doing so would enable the user to receive uninterrupted flow of data or service.

6. Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy U.S. Patent No 6,697,341 in view of Markowitz in view of Dunlap et al. U.S. Patent No 6,760,749



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As to claims 9 and 21 , Roy teaches a communications system and a method for transporting video data from a centralized location to an end user, the system comprising:

a network that transmits video data to a video cache at a local center located as close as possible to the end user ;

a video cache at a local center capable of receiving video data from a centralized location;

a customer premises device capable of receiving the video data from the video cache; and a stream manager that controls a video stream from a centralized location to a local center;

a stream manager that controls a video stream from centralized location to a local center (see the rejection of claim 1).

Roy does not teach the system and method wherein the stream manager is capable of determining whether video content stored at the central location is a candidate for archiving at the local center based upon:

available storage space in the local center video storage;

history of the content being previously accessed by end users served by that local; and

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history of similar content being previously accessed by end users served by that local center

Dunlop teaches a system and method wherein the stream manager is capable of determining whether video content stored at the central location is a candidate for archiving at the local center based upon:

available storage space in the local center video storage (see col.4 and fig.1 Dunlap discloses the storing of video and audio stream) ;

history of the content being previously accessed by end users served by that local center ( see col.7 , lines 48 – 57 and fig.1 Dunlap discloses the archive server that provides future access and on demand streaming distribution) ; and

history of similar content being previously accessed by end users served by that local center ( see col. 4 , lines 52 and 60 Dunlap discloses the archiving of multimedia content).

It would have been obvious for one ordinary skill in the art to include the step of archiving the data in Dunlap's invention because by doing so would allow them to be extracted by a suitable program.

## **6. Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N Nano whose telephone number is (703) 305-4651. The examiner can normally be reached on Monday – Friday from 8:30 – 5:30

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 308- 7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano

Sept 30,2004

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100